TECHNOLOGY NEEDS/OPPORTUNITIES STATEMENT

PROCESSING WASTE FOR SHIPMENT TO WIPP

Identification No.: RL-MW033
Date: October 2001

Program: Waste Management
OPS Office/Site: Richland Operations Office/Hanford Site
PBS No.: RL-CP02
Waste Stream: 1578 – WRAP Product Available to WIPP
TSD Title: 205 – WRAP
Operable Unit (if applicable): N/A
Waste Management Unit (if applicable): N/A
Facility: WRAP

Priority Rating:

This entry addresses the "Accelerated Cleanup: Paths to Closure (ACPC)" Priority:

____ 1. Critical to the success of the ACPC
_X_ 2. Provides substantial benefit to ACPC projects (e.g., moderate to high lifecycle cost savings or risk reduction, increased likelihood of compliance, increased assurance to avoid schedule delays)
____ 3. Provides opportunities for significant, but lower cost savings or risk reduction, and may reduce uncertainty in ACPC project success.

Need Title: Processing Waste for Shipment to WIPP

Need/Opportunity Category: *Technology Opportunity* – The Site desires an alternative to the current baseline technology.

Need Description: Technology needs include:

- The need for a method to increase production rates of CH-TRU processing for shipment to WIPP, including improved glovebox tools and procedures.
- Better containment of contamination (on the inlet and loadout ports),
- Technology to breach inner confinement (plastic bags) without sorting and manually piercing
- Improved headspace gas sampling and analysis capability (faster and cheaper).

Schedule Requirements:

Earliest Date Required: 10/01/04

Latest Date Required: 10/01/04

Problem Description: Technology is needed to improve CH-TRU processing in the areas of contamination control, improved tools and procedures, inner confinement breaching, and improved headspace gas sampling.

Potential Life-Cycle Cost Savings of Need (in $000s) and Cost Savings Explanation: TBD

Benefit to the Project Baseline of Filling Need: Lower cost of processing CH-TRU and improved safety through contamination control.

Relevant PBS Milestone: None

Functional Performance Requirements:

Work Breakdown Structure (WBS) No.:	***TIP No.:***
1.2.2	Candidate

Justification For Need:

Technical: Controlling spread of contamination and improved processing rates through various methods.

Regulatory: None identified

Environmental Safety & Health: Control of contamination is essential for worker safety.

Cultural/Stakeholder Concerns: None identified

Other: None identified.

Current Baseline Technology: Waste is currently being processed in the WRAP TRU glovebox line. Technology would improve efficiency of the process.

End-User: Waste Management.

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Waste volume, m^3	Current: N/A; Forecasted (5 yrs): 1,600 m^3
Waste form	Debris waste
Waste stream I.D.	1578
Contaminants and co-contaminants	TBD
Function of technology	Increase efficiency of CH-TRU waste processing
Source category	Various Hanford Site programs